









Phosphate additives for nonaqueous electrolyte rechargeable electrochemical cells

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Abstract of EP1213782

A lithium ion electrochemical cell having high charge/discharge capacity, long cycle life and exhibiting a reduced first cycle irreversible capacity, is described. The stated benefits are realized by the addition of at least one phosphate additive having the formula: $(R<1>O)P(=O)(OR<2>)(OR<3>)$ and wherein $R<1>$, $R<2>$ and $R<3>$ are the same or different, wherein at least one, but not all three, of the R groups is hydrogen, or at least one of the R groups has at least 3 carbon atoms and contains an sp or sp² hybridized carbon atom bonded to an sp³ hybridized carbon atom bonded to the oxygen atom bonded to the phosphorous atom.

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